

I CLAIM

1. A mounting arrangement for simultaneous machining of opposite faces of a component which may retain residual stresses, the arrangement comprising multiple point contact abutment clamping in use of a component, the arrangement characterised in that only three clamp pairs are provided to enable residual stress relief in use as the component is machined and incorporating a damper to augment vibration control otherwise diminished by the reduced contact clamping provided by only minimal contact abutments.
2. An arrangement as claimed in claim 1, characterised in that each clamp pair is provided by opposed pairs of a clamping pad and seating pad either side of the component.
3. An arrangement as claimed in claim 2, characterised in that at least one of the clamping pads or the seating pads is configured for consistency with the presented component profile.
4. An arrangement as claimed in claim 3, characterised in that such consistency ensures appropriate approximate configuration of the component within the mounting arrangement.
5. An arrangement as claimed in claim 1 characterised in that each contact abutment is adjustable in terms of presentation relative to the component.
6. An arrangement as claimed in claim 1 characterised in that the damper is perpendicular to the axial direction of contact abutment.
7. An arrangement as claimed in claim 1 characterised in that the damper comprises a hydraulic ram and a damper member and the damper member is held in contact with the component by a force.
8. An arrangement as claimed in claim 7 characterised in that the force is variable.

9. An arrangement as claimed in claim 7 characterised in that the force applied by the damper is controlled dependent on sensed vibration or machining process step or machining process regime or current process step or to
5 facilitate an anti-phase cancellation oscillation within the component to harmonic vibration beats.
10. An arrangement as claimed in claim 1 characterised in that the damper comprises a contact finger of elastomeric material.
- 10 11. A method of simultaneously machining opposite faces of a component which may retain residual stresses, the method comprising clamping the component with multiple point abutment contacts and thereafter machining the component, the method characterised in that the component is only
15 clamped by three clamp pairs and a vibration damper is applied to the component in order to augment vibration control otherwise diminished by reduced contact abutments.
12. A method as claimed in claim 11, wherein the method comprises an initial machining process for removal of bulk
20 material from a rough initial component and a final machining process with more resilient clamping of the component for more accurate machining of the component.